REMARKS

Application No. 10/820,588

The Office Action of April 10, 2007 has been reviewed and the comments therein were carefully considered. Claims 1-8 and 9-19 are currently pending. By this amendment claims 1-7, and 10 have been amended, claim 9 has been cancelled, and claim 13-19 have been added. No new matter has been added to the application.

Claim Objections

Claim 6 stands objected to because of the following informalities: the claim states the liquid crystal display after claiming a display and not specifying that the display is a liquid crystal display.

Claim 6 has amended to overcome informalities identified by the Office Action. In addition, claim 9 has been cancelled.

Claim Rejections Under 35 USC §103

Claims 1-12 are rejected under 35 USC §103(a) as being unpatentable over Applicant's admitted prior art (background of the invention) in view of Lin, U.S. Publication No. 2005/0151716. Applicant respectfully traverses the rejections.

Applicant admitted prior art (background of the invention) keyboard and display assembly were on a printer, Lin does not cure the deficiencies of the admitted prior art. Even combing the admitted prior art and Lin, would not meet the claimed invention.

Currently amended independent claim 1 has been amended to include that the claimed features of the liquid crystal display, the processor, and the keyboard are part of a keyboard and display assembly of "a printing device." Support for this amendment may be found on at least pg. 4 lines 16-23 that recites in part: "It is noted that where the keyboard and display assembly of the present invention forms a part of a larger device such as a printer...."

Applicant respectfully submits that Lin does not disclose a keyboard and display assembly for a printing device. In particular, Lin merely discloses the use of a brightness control system for LCD panel displays that may be associated with portable computers, DVD players,

portable electronic devices, and/or standalone panel monitors and/or television displays. (See; Pg. 1, Paragraph 0001). Applicant respectfully submits that Applicant's background of the invention does discuss a keyboard and display assembly for a printer. However, the combination of Applicant's background of the invention and Lin do not disclose, teach, or suggest many features of Applicant's claimed invention which are discussed below.

Independent claim 1 includes the claimed feature of "at least one contrast key for controlling the contrast of the liquid crystal display" (Emphasis Added). The Office Action attempts to equate Lin's control of brightness of a LCD with the contrast control of independent claim 1. Applicant respectfully submits that control of brightness of a LCD panel is distinguishable from the control of contrast of a LCD panel. Applicant submits that the brightness level of a LCD refers to the overall lightness level of an image displayed on the LCD. This is different from the contrast level of an LCD which refers to changes in the distinction between the light and dark areas of the image displayed on the LCD. Lin merely controls brightness of an LCD and is silent regarding contrast of an LCD display. Therefore, for at least this additional reason, Applicant respectfully submits that independent claim 1 is in condition for allowance.

Furthermore, independent claim 1 is allowable for at least another reason. Independent claim 1 includes the claimed feature of "the contrast key directly coupled to the liquid crystal display by the potentiometer." (Emphasis Added). The Office Action contends that Lin teaches "the contrast key (brightness control) coupled to the liquid crystal display bypassing the processor..." (Office Action, page 3). However, Applicant respectfully submits that Lin does not disclose a contrast key directly coupled to the liquid crystal display by the potentiometer.

As can be seen in Figure 3 of Lin, Lin discloses a brightness control system comprised of an input to vary the brightness of a LCD panel, coupled to the LCD panel by a controller and power supply. Further illustration is provided at [0020] which recites in part:

The system may include a power supply control circuitry (hereinafter 'controller 302'), a power supply, a panel display, an ambient light sensor and a panel brightness sensor.

Lin discloses additional embodiments at Figures 3a and 4 which add a processor and a user set default brightness level limitation respectively to the embodiment depicted in Figure 3.

However, Lin does not disclose coupling a contrast key directly to the LCD by a potentiometer. In all of the embodiments of Lin, inputs such as key inputs are executed by a processor. The processor in Lin is not bypassed.

Although Lin does disclose use of a potentiometer, Lin's disclosure of the potentiometer is limited to user input circuitry as illustrated in [0027] which reads in part: "User input circuitry may comprise, for example, a variable resistor (e.g., user controlled potentiometer) located on the panel display or on the vicinity of the keyboard area." Thus, Lin discloses a potentiometer being the user input but does not disclose the potentiometer coupling a contrast key directly to the LCD display. Furthermore, as Figure 4 of Lin discloses, the controller 402 is not bypassed as the controller 402 still controls the brightness of the LCD. Therefore, because Lin does not disclose coupling at least one contrast key directly to the LCD display by a potentiometer, Applicant respectfully submits that independent claim 1 is in condition for allowance. Dependent claims 2-5 which depend from independent claim 1 are allowable for at least the same reason as independent claim 1 from which they ultimately depend.

Currently amended independent claim 6 has been amended to include the claimed features of a liquid crystal display, a processor, and a keyboard are part of the keyboard and display assembly of "a printer." Support for this amendment may be found on at least pg. 4 lines 16-23 that recites in part: "It is noted that where the keyboard and display assembly of the present invention forms a part of a larger device such as a printer..."

Independent claim 6 includes the claimed feature of "at least one contrast control key coupled to the liquid crystal display by a potentiometer such that the coupling of the contrast control key bypasses the processor." (Emphasis Added). The Office Action contends that Lin teaches "the contrast key (brightness control) coupled to the liquid crystal display bypassing the processor" (Office Action, page 3). However, as stated above Applicant respectfully submits that Lin does not disclose a contrast control key coupled to the liquid crystal display by the potentiometer. Moreover, the processor in Lin in not bypassed as the inputs in Lin are all executed by the processor 402. Furthermore, Lin concerns brightness control and not

Applicant's claimed contrast control. Therefore, for at least these reasons independent claim 6 is in condition for allowance. Dependent claims 7-8 which depend from independent claim 6 are allowable for at least the same reason as independent claim 6 from which they ultimately depend.

Currently amended independent claim 10 has been amended to include the claimed features of a liquid crystal display, a processor, and a keyboard are part of a keyboard and display assembly "for a barcode label printer." Support for this amendment may be found on at least pg. 4 lines 16-23 that recites in part: "In a set-up mode, the processor 20 may also control various set-up options of the keyboard and display assembly and/or device, such as a barcode label printer..."

Independent claim 10 includes the claimed feature of "a first contrast control key coupled to the liquid crystal display by a potentiometer to increase the display's contrast and a second contrast control key coupled to the liquid crystal display by the potentiometer to decrease the display's contrast " (Emphasis Added). The Office Action contends that Lin teaches "the contrast key (brightness control) coupled to the liquid crystal display bypassing the processor . . . " (Office Action, page 3). However, as stated above Applicant respectfully submits that Lin does not disclose a contrast control key coupled to the liquid crystal display by the potentiometer. Moreover, the processor of Lin is not bypassed as the inputs in Lin are all executed by the processor 402. Furthermore, Lin concerns brightness control and not Applicant's claimed contrast control. Therefore, for at least these reasons independent claim 10 is in condition for allowance. Dependent claims 11-12 which depend from independent claim 10 are allowable for at least the same reason as independent claim 10 from which they ultimately depend.

New claims 13-19 have been added are also allowable over the cited references. Support for the new claims may be found in the original filed specification. Applicant respectfully submits that claims 13-19 are in condition for allowance. A notice to this effect is respectfully requested

Date: July 3, 2007

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Applicant therefore respectfully requests reconsideration of the pending claims and a finding of their allowability. Please feel free to contact the undersigned should any questions arise with respect to this case that may be addressed by telephone.

Respectfully submitted,

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